

## ABSTRACT OF THE DISCLOSURE

Characteristics of a nonvolatile semiconductor memory device are improved. The memory cell comprises: an ONO film constituted by a silicon nitride film SIN for accumulating charge and by oxide films BOTOX and TOPOX disposed thereon and thereunder; a memory gate electrode MG disposed at an upper portion thereof; a select gate electrode SG disposed at a side portion thereof through the ONO film; a gate oxide film SGOX disposed thereunder. By applying a potential to a select gate electrode SG of a memory cell having a source region MS and a drain region MD and to the source region MS and by accelerating electrons flowing in a channel through a high electric field produced between a channel end of the select transistor and an end of an n-type doped region ME disposed under the memory gate electrode MG, hot holes are generated by impact ionization, and the hot holes are injected into a silicon nitride film SIN by a negative potential applied to the memory gate electrode MG, and thereby an erase operation is performed.